

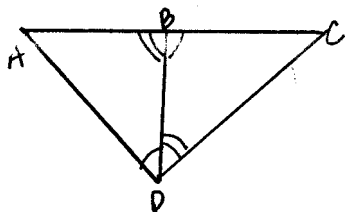
Name _____ Geometry

Unit 4 Worksheet 9 CPCTC Worksheet

1) What does CPCTC stand for? What must you prove first before you can use CPCTC?

For #2-4, give the reason the triangles are congruent. Then give the reason you can prove the other parts of the triangle congruent.

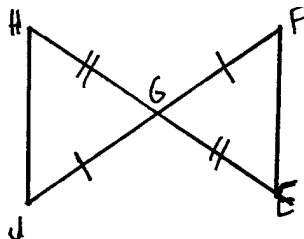
2)



$\triangle ABD \cong \triangle CBD$ by _____

$\angle A \cong \angle C$ by _____

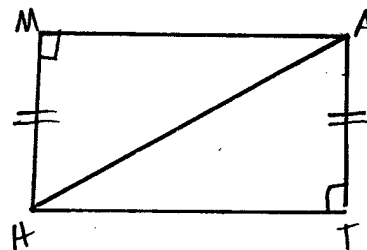
3)



$\triangle HJG \cong \triangle FEG$ by _____

$\angle H \cong \angle F$ by _____

4)



$\triangle MHA \cong \triangle TAH$ by _____

$\angle MAH \cong \angle THA$ by _____

5) **Given:** $\angle ADB$ and $\angle CDB$ are right angles

D is the midpoint of AC

Prove: $\overline{AB} \cong \overline{CB}$

STATEMENTS

REASONS

1.

1.

2.

2.

3. $\overline{AD} \cong \overline{CD}$

3.

4. $\angle ADB \cong \angle CDB$

4.

5.

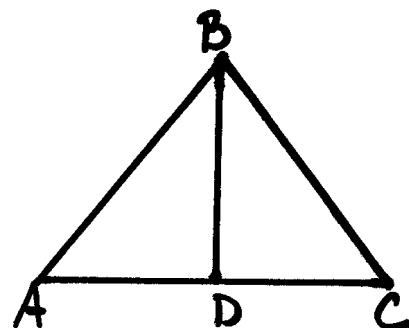
5. Reflexive

6.

6. SAS

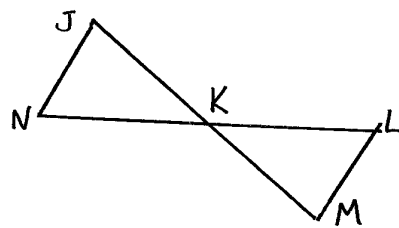
7. $\overline{AB} \cong \overline{CB}$

7.



6) **Given:** $\angle N \cong \angle L$, and $\overline{JK} \cong \overline{MK}$

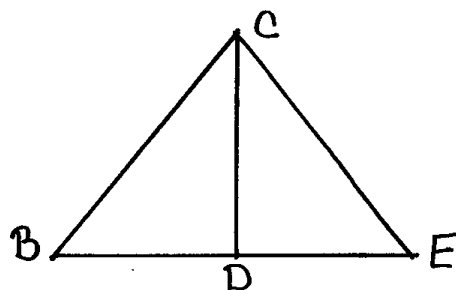
Prove: $\angle J \cong \angle M$



STATEMENTS	REASONS
1.	1.
2.	2.
3.	3. Vertical Angles are congruent
4. $\triangle JKN \cong \triangle MKL$	4.
5. $\angle J \cong \angle M$	5.

7) **Given:** $\overline{BC} \cong \overline{EC}$, and $\angle BCD \cong \angle ECD$

Prove: $\overline{BD} \cong \overline{ED}$



STATEMENTS	REASONS
1.	1.
2.	2.
3.	3. Reflexive
4. $\triangle BCD \cong \triangle ECD$	4.
5. $\overline{BD} \cong \overline{ED}$	5.